

**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Withdrawn) A method of protecting a keratinous fiber from extrinsic damage comprising  
  
applying to said keratinous fiber a composition comprising  
  
at least one sugar chosen from C3 to C5 monosaccharides and derivatives thereof, wherein said at least one sugar is present in an amount effective to protect said keratinous fiber.
2. (Withdrawn) The method of protecting a keratinous fiber from extrinsic damage according to claim 1, wherein said C3 to C5 monosaccharide are chosen from pentoses.
3. (Withdrawn) The method of protecting a keratinous fiber from extrinsic damage according to claim 2, wherein said pentoses are chosen from aldopentoses and ketopentoses.
4. (Withdrawn) The method of protecting a keratinous fiber from extrinsic damage according to claim 3, wherein said aldopentoses are chosen from xylose, arabinose, lyxose, and ribose.
5. (Withdrawn) The method of protecting a keratinous fiber from extrinsic damage according to claim 3, wherein said ketopentoses are chosen from ribulose and xylulose.

6. (Withdrawn) The method of protecting a keratinous fiber from extrinsic damage according to claim 1, wherein said C3 to C5 monosaccharides are chosen from tetroses.

7. (Withdrawn) The method of protecting a keratinous fiber from extrinsic damage according to claim 6, wherein said tetroses are chosen from aldotetroses and ketotetroses.

8. (Withdrawn) The method of protecting a keratinous fiber from extrinsic damage according to claim 7, wherein said aldotetroses are chosen from erythrose and treose.

9. (Withdrawn) The method of protecting a keratinous fiber from extrinsic damage according to claim 1, wherein said at least one sugar is erythrulose.

10. (Withdrawn) The method of protecting a keratinous fiber from extrinsic damage according to claim 1, wherein said C3 to C5 monosaccharides are chosen from trioses.

11. (Withdrawn) The method of protecting a keratinous fiber from extrinsic damage according to claim 10, wherein said trioses are chosen from aldotrioses and ketotrioses.

12. (Withdrawn) The method of protecting a keratinous fiber from extrinsic damage according to claim 1, wherein said at least one sugar is glyceraldehyde.

13. (Withdrawn) The method of protecting a keratinous fiber from extrinsic damage according to claim 1, wherein said at least one sugar is dihydroxyacetone.

14. (Withdrawn) The method of protecting a keratinous fiber from extrinsic damage according to claim 1, wherein said C3 to C5 monosaccharides are chosen from furanoses and derivatives thereof.

15. (Withdrawn) The method of protecting a keratinous fiber from extrinsic damage according to claim 1, wherein said derivatives of C3 to C5 monosaccharides are chosen from imine derivatives, hemiacetal derivatives, hemiketal derivatives, and oxidized derivatives.

16. (Withdrawn) The method of protecting a keratinous fiber from extrinsic damage according to claim 1, wherein said at least one sugar is lyxozylimine.

17. (Withdrawn) The method of protecting a keratinous fiber from extrinsic damage according to claim 1, wherein said derivatives of C3 to C5 monosaccharides are chosen from dimers and oligomers of said C3 to C5 monosaccharide.

18. (Withdrawn) The method of protecting a keratinous fiber from extrinsic damage according to claim 1, wherein said at least one sugar is xylobiose.

19. (Withdrawn) The method of protecting a keratinous fiber from extrinsic damage according to claim 1, wherein said composition further comprises at least one additional sugar, said at least one additional sugar being different from said C3 to C5 monosaccharides and derivatives thereof.

20. (Withdrawn) The method of protecting a keratinous fiber from extrinsic damage according to claim 19, wherein said at least one additional sugar is chosen from monosaccharides, disaccharides, and polysaccharides.

21. (Withdrawn) The method of protecting a keratinous fiber from extrinsic damage according to claim 20, wherein said monosaccharides are chosen from hexoses.

22. (Withdrawn) The method of protecting a keratinous fiber from extrinsic damage according to claim 21, wherein said hexoses are chosen from allose, altrose, glucose, mannose, gulose, idose, galactose, talose, sorbose, psicose, fructose, and tagatose.

23. (Withdrawn) The method of protecting a keratinous fiber from extrinsic damage according to claim 1, wherein said at least one sugar is present in said composition at a concentration ranging from 0.01% to 5.00% relative to the total weight of the composition.

24. (Withdrawn) The method of protecting a keratinous fiber from extrinsic damage according to claim 19, wherein said at least one additional sugar is present in said composition at a concentration ranging from 0.01% to 5.00% relative to the total weight of the composition.

25. (Withdrawn) The method of protecting a keratinous fiber from extrinsic damage according to claim 1, wherein said composition is in the form of a liquid, oil, paste, stick, dispersion, emulsion, lotion, gel, or cream.

26. (Withdrawn) The method of protecting a keratinous fiber from extrinsic damage according to claim 1, wherein said keratinous fiber is chosen from hair, eyelashes, and eyebrows.

27. (Withdrawn) The method of protecting a keratinous fiber from extrinsic damage according to claim 1, wherein the extrinsic damage is caused by heating, UV radiation, or chemical treatment.

28. (Withdrawn) A method of repairing a keratinous fiber following extrinsic damage comprising

applying to said damaged keratinous fiber a composition comprising at least one sugar chosen from C3 to C5 monosaccharides and derivatives thereof, wherein said at least one sugar is present in an amount effective to repair said keratinous fiber.

29. (Withdrawn) The method of repairing a keratinous fiber following extrinsic damage according to claim 28, wherein said composition further comprises at least one additional sugar, said at least one additional sugar being different from said C3 to C5 monosaccharides and derivatives thereof.

30. (Currently Amended) A method of protecting a keratinous fiber from extrinsic damage or repairing a keratinous fiber following extrinsic damage comprising

applying to said keratinous fiber a composition comprising at least one sugar chosen from C3 to C5 monosaccharides and derivatives thereof; and

heating said keratinous fiber to at least 45°C,

wherein said at least one sugar is present in an amount effective to protect said keratinous fiber or repair said keratinous fiber,

further wherein said composition is applied prior to said heating or during said heating,

wherein protecting a keratinous fiber means preserving a greater degree of the  $\alpha$ -structure and/or the tensile strength of the keratinous fiber following treatment of the keratinous fiber with said composition as compared to not treating the keratinous fiber with said composition; and

wherein repairing a damaged keratinous fiber means increasing the  $\alpha$ -structure and/or tensile strength of the damaged keratinous fiber following treatment of the damaged keratinous fiber with said composition as compared to not treating the keratinous fiber with said composition.

31. (Previously Presented) The method according to claim 30, wherein said C3 to C5 monosaccharides are chosen from pentoses.

32. (Previously Presented) The method according to claim 31, wherein said pentoses are chosen from aldopentoses and ketopentoses.

33. (Previously Presented) The method according to claim 32, wherein said aldopentoses are chosen from xylose, arabinose, lyxose, and ribose.

34. (Previously Presented) The method according to claim 32, wherein said ketopentoses are chosen from ribulose and xylulose.

35. (Previously Presented) The method according to claim 30, wherein said C3 to C5 monosaccharides are chosen from tetroses.

36. (Previously Presented) The method according to claim 35, wherein said tetroses are chosen from aldotetroses and ketotetroses.

37. (Previously Presented) The method according to claim 36, wherein said aldotetroses are chosen from erythrose and treose.

38. (Previously Presented) The method according to claim 30, wherein said at least one sugar is erythrulose.

39. (Previously Presented) The method according to claim 30, wherein said C3 to C5 monosaccharides are chosen from trioses.

40. (Previously Presented) The method according to claim 39, wherein said trioses are chosen from aldotrioses and ketotrioses.

41. (Previously Presented) The method according to claim 30, wherein said at least one sugar is glyceraldehyde.

42. (Previously Presented) The method according to claim 30, wherein said at least one sugar is dihydroxyacetone.

43. (Previously Presented) The method according to claim 30, wherein said C3 to C5 monosaccharides are chosen from furanoses and derivatives thereof.

44. (Previously Presented) The method according to claim 30, wherein said derivatives of C3 to C5 monosaccharides are chosen from amine derivatives, hemiacetal derivatives, hemiketal derivatives, and oxidized derivatives.

45. (Previously Presented) The method according to claim 30, wherein said derivatives of C3 to C5 monosaccharides are chosen from dimers and oligomers of said C3 to C5 monosaccharide.

46. (Previously Presented) The method according to claim 30, wherein said at least one sugar is xylobiose.

47. (Previously Presented) The method according to claim 30, wherein said composition further comprises at least one additional sugar, said at least one additional sugar being different from said C3 to C5 monosaccharides and derivatives thereof.

48. (Previously Presented) The method according to claim 47, wherein said at least one additional sugar is chosen from monosaccharides, disaccharides, and polysaccharides.

49. (Previously Presented) The method according to claim 48, wherein said monosaccharides are chosen from hexoses.

50. (Previously Presented) The method according to claim 49, wherein said hexoses are chosen from allose, altrose, glucose, mannose, gulose, idose, galactose, talose, sorbose, psicose, fructose, and tagatose.



51. (Previously Presented) The method according to claim 30, wherein said at least one sugar is present in said composition at a concentration ranging from 0.01% to 5.00% relative to the total weight of the composition.

52. (Previously Presented) The method according to claim 47, wherein said at least one additional sugar is present in said composition at a concentration ranging from 0.01% to 5.00% relative to the total weight of the composition.

53. (Previously Presented) The method according to claim 30, wherein said composition is in the form of a liquid, oil, paste, stick, dispersion, emulsion, lotion, gel, or cream.

54. (Previously Presented) The method according to claim 30, wherein said keratinous fiber is chosen from hair, eyelashes, and eyebrows.

55. (Previously Presented) The method according to claim 30, wherein said extrinsic damage is caused by heating, UV radiation, or chemical treatment.

56. (Previously Presented) The method according to claim 30, wherein said composition protects a keratinous fiber from extrinsic damage and repairs a keratinous fiber following extrinsic damage.